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ABSTRACT

Performance data on the Descriptive Tests of Language Skills (DTLS) for entering college students were collected through a pilot study of 4,234 students in 16 colleges. This study was also designed to permit several checks on the validity of the DTLS by examining the relationship of DTLS scores to the following criteria: English course grades, scores on essays administered concurrently with the DTLS prior to course enrollment, and scores on end-of-term essays. Results show that DTLS scores have a substantial concurrent relationship to carefully scored essays and that they predict writing course outcomes whether measured by end-of-course grades or a scored essay. Thus, these results lend support to the use of the DTLS as an aid in making decisions about the placement of students in introductory level college composition courses. The multitrait-multimethod matrix analysis did not provide evidence for the discriminant validity of the three DTLS that assess writing skills: Sentence Structure, Usage, and Logical Relationships. Whether this was due to a failure of the tests to measure relatively independent traits or to problems with the criteria used for this phase of the analysis is an open question. Background questions from the DTLS answer sheet and instructions for administering DTLS Exercises, the DTLS Exercises, and the DTLS Scoring Criteria are appended. (PN)

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College Board Report

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The Validity of the Descriptive Tests of Language Skills: Relationships to Direct Measures of Writing Ability and to Grades in Introductory College English Courses

David Weiss
Rex Jackson

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ABSTRACT

The Descriptive Tests of Language Skills (DTLS)—comprising tests of reading comprehension, logical relationships, vocabulary, usage, and sentence structure developed by the College Board—are designed to help colleges assess the language skills of entering students for placement and instructional planning purposes. A complete description of the DTLS and of field trials of the tests may be found in the *Guide to the Use of the Descriptive Tests of Language Skills* (College Entrance Examination Board, 1978).

Performance data on the DTLS for entering college students were collected through a pilot study of 4,234 students in 16 colleges (see Table 1).

Table 1. DTLS Pilot Study Colleges

	Region	*Type*	*Control*
Boston State College	East	4-Year	Public
Canada College (California)	West	2-Year	Public
College of Alameda (California)	West	2-Year	Public
Cuyahoga Community College (Ohio)	Midwest	2-Year	Public
Fairleigh Dickinson University (New Jersey)	East	4-Year	Private
Framingham State College (Massachusetts)	East	4-Year	Public
Indiana University at Bloomington	Midwest	4-Year	Public
Los Angeles Pierce College	West	2-Year	Public
Northeastern University (Massachusetts)	East	4-Year	Private
North Lake College (Texas)	Southwest	2-Year	Public
Patrick Henry State Community College (Alabama)	South	2-Year	Public
Suffolk County Community College (New York)	East	2-Year	Public
Tarkio College (Missouri)	Midwest	4-Year	Private
University of Nevada, Las Vegas	West	4-Year	Public
University of Pittsburgh	East	4-Year	Public
University of Wisconsin, Green Bay	Midwest	4-Year	Public

Data from the pilot study were used in developing score scales for the tests, in creating percentile ranks for colleges to use as reference data, and in studying the basic properties of DTLS test scores. The results of these studies are also reported in the *Guide to the Use of the Descriptive Tests of Language Skills*.

The pilot study was also designed to permit several checks on the validity of the DTLS. To this end, several kinds of criterion data were collected, including English course grades (in nine colleges), scores on essays administered concurrently with the DTLS prior to course enrollment (in five colleges), and scores on end-of-term essays (in two colleges). The relationships of DTLS scores to these criteria provide evidence of the utility and validity of DTLS scores for their intended purposes and are the subject of this report.

VARIABLES

The variables used in this study are summarized in Table 2 and described in further detail in the following sections.

Table 2. Variables Used in this Study

Variable	*Description*
1	Total Score on DTLS Reading Comprehension
2	Total Score on DTLS Logical Relationships
3	Total Score on DTLS Vocabulary
4	Total Score on DTLS Usage
5	Total Score on DTLS Sentence Structure
6	Self-reported High School Grades in English
7	Essay Set A (Pretest)—Total of Analytic Scores
8	Essay Set A—Subscore for Sentence Structure
9	Essay Set A—Subscore for Usage
10	Essay Set A—Subscore for Logical Relationships
11	Essay Set B (Pretest)—Total Holistic Score
12	Essay Set C (Posttest)—Total Holistic Score
13	End of First Term Grade in Introductory Writing course

The DTLS

The DTLS are generally easier than other multiple-choice tests for college students. The tests are structured so that most students entering college will correctly answer at least two-thirds of the questions on each test. The DTLS have several purposes. They are designed to help college teachers assign entering students to appropriate English courses, identify students who may need assistance in particular aspects of reading and language use before undertaking college-level work, tailor instruction in reading and composition to student needs, and plan instruction for classes or groups of students. It is expected that total scores on individual tests will be most useful for screening and placement. Each of the tests (except the vocabulary test) also provides descriptive cluster scores, which may be used in assessing students' strengths and weaknesses and in planning instruction.

All five tests were used in the study and are briefly described below.

Reading Comprehension Test (45 questions, 30 minutes)

Clusters	*Number of Questions*
1. Understanding main ideas	15
2. Understanding direct statements	13
3. Drawing inferences	17

In this test, the student is asked to read short passages written in a variety of styles on a variety of subjects. The student is then asked to demonstrate an ability to understand main ideas and direct statements and to draw inferences by answering a series of multiple-choice questions about each passage.

Logical Relationships Test (50 questions, 30 minutes)

Clusters	*Number of Questions*
1. Categorizing ideas	12
2. Using appropriate connectives	13
3. Making analogies	12
4. Recognizing principles of organization	13

In this test, the student is asked to select the word that fits the general category presented and to select the general category for a given set of words. In addition, the student must select the connective that will logically relate two parts of the sentence, choose the pair of words that have the same relationship as a given pair of words, and determine the relationship between two sentences.

Vocabulary Test (30 questions, 15 minutes)

In this test, the student is asked to choose the synonyms for given words.

Usage Test (40 questions, 30 minutes)

Clusters	*Number of Questions*
1. Pronouns	10
2. Modifiers	10
3. Diction and idioms	10
4. Verbs	10

In this test, the student is presented with a series of sentences and is asked to select the part of each sentence that is in error according to the conventions of standard written English.

Sentence Structure Test (35 questions, 30 minutes)

Clusters	*Number of Questions*
1. Using complete sentences	10
2. Using coordination and subordination appropriately	13
3. Placing modifiers appropriately	12

In this test, the student must answer two kinds of questions. The first asks the student to find and correct an error, if there is one, in the underlined part of the sentence. The second asks the student to rephrase a sentence mentally, creating a new sentence that is equally acceptable in standard written English.

In conjunction with the administration of the five tests, students were asked to provide information on several background questions such as the student's ethnic group, present college level classification, and years of previous high school English study. The complete set of background questions can be found in Appendix A to this report.

The Essays

Three different essay exercises were administered. Two forty-minute exercises were given as pretest exercises. These exercises were to be written at the beginning of the semester and as near to the time that the DTLS were taken as possible. A twenty-minute essay was given as a posttest exercise at the end of the course. The three exercises are briefly discussed below. Copies of the exercises and the scoring guide can be found in Appendix B of this report.

Pretest Essays

The pretest essays consisted of two sets of writing exercises. Set A contained four brief exercises that could be completed in class or at home. Each of the exercises were read by two experienced readers and scored analytically. The analytical scoring procedure required readers to use 16 criteria for judging each essay. Each of the 16 criteria was rated on a 0–4 scale. The two readings were summed to produce a student's score for the present analyses.

The sixteen criteria used in the analytic scoring are listed below and in Appendix B.

1. Uses complete sentences
2. Uses coordination and subordination appropriately
3. Places modifiers appropriately
4. Uses modifier forms correctly
5. Follows pronoun-antecedent agreement
6. Gives each pronoun an antecedent
7. Uses pronoun case correctly
8. Uses appropriate diction
9. Uses appropriate idioms
10. Uses subject-verb agreement
11. Uses tenses correctly
12. Uses verb forms correctly
13. Uses connecting words appropriately
14. Uses specific examples
15. Has beginning, middle, and end
16. Organizes essay satisfactorily

After several exploratory analyses using this entire set of scores, it was decided, for purposes of improving criterion reliability, to develop essay subscores corresponding to the skills measured by three of the DTLS. Therefore, scores on criteria 1 through 3 were summed to form a subscore for *sentence structure*; scores on criteria 4 through 12 were summed to form a subscore for *usage*; and scores on criteria 13 through 16 were summed to form a subscore for *logical relationships*. Analyses using these subscores, but not the original 16 analytic scores, will be reported here.

The second set of exercises (Set B) consisted of two topics. These exercises were also graded by experienced readers; however, this set was graded holistically. Each exercise was graded on a 1 to 6 scale and the reader scores summed to produce a student's total score. If the scores given by the two readers differed by more than two points, a third reader scored the exercise and one of the scores was adjusted either up or down a point.

Posttest Essay

This exercise (Set C) consisted of a single topic. Again, this topic was scored holistically on a 1 to 6 scale by two experienced readers and the scores were summed to produce a student's total score. Score discrepancies of more than 2 points were resolved in the same manner as score discrepancies in Set B.

End-of-Course Grades

At the end of the first semester, colleges were asked to submit grades in introductory writing courses for students who had taken the DTLS at the beginning of the term. Nine colleges submitted usable data.

SAMPLE SELECTION

Several samples were selected for the analyses reported here. These samples were, in general, the largest groups with complete data on certain variables of interest. Table 3 provides a summary description of the analysis samples.

Table 3. Analysis Samples

Description of Group	*Sample Size*	*Number of Colleges Represented*	*Used For*
1. All cases with complete data on 5 DTLS tests	830	10	Basic test statistics (Table 4)
2. Students with selected DTLS test scores and course grades	Variable by college and course	9	Prediction from tests to course grades (Table 9)
3. All cases with complete data on 5 DTLS tests and Essays A and B	224	5	Concurrent validity of tests vs. essay (Tables 5 and 8)
4. All cases with complete data on 5 DTLS tests and Essay C	123	2	Predictive validity of tests vs. essay (Table 10)

BASIC STATISTICAL DATA

This section reviews basic statistical data on the DTLS and the pretest and posttest essays. The *Guide to the Use of the Descriptive Tests of Language Skills* has a more complete discussion of the properties of the DTLS.

The DTLS

For basic reference purposes, statistics describing the performance of a sample of 830 students taking all five of the DTLS are presented in Table 4. These statistics include raw score means, standard deviations, reliabilities, and intercorrelations for total test scores.

Essay Reliability

Although there are no direct methods for estimating the reliability of essay scores when students respond only once to a particular topic, it is possible to estimate a range in which the reliability should fall. Because the reliability of essay scores cannot exceed the reliability of scoring, a reasonable upper limit for this range is the estimate of scoring reliability (the inter-reader correlation boosted by the Spearman-Brown formula for two readings).

The lower limits of the essay scores' reliability can be estimated according to the following formula from test theory for the correction for attenuation[1] due to unreliability. By selecting the highest observed correlation between one of the DTLS and the essay, and by making the extreme assumption that the true correlation between the test and essay scores is 1.0, the formula for the reliability estimate of the essays can be solved by treating as known the observed test-essay correlation, the assumed true correlation, and the test reliability. The estimate is a lower limit of the essay reliability range in the sense that any lower

1. $rXY\ (\text{true}) = \dfrac{{}^{t}XY}{\sqrt{{}^{t}XX}\ \sqrt{{}^{t}YY}}$

Table 4. Raw Score Means, Standard Deviations, Reliabilities, and Correlations among DTLS Scores (N = 830)

			Correlation						
DTLS Scores	*Number of Questions*	*Reliability (KR = 20)*	*Reading Comprehension*	*Logical Relationships*	*Vocabulary*	*Usage*	*Sentence Structure*	*Mean*	*Standard Deviation*
Reading Comprehension	45	.89	1.00	.79	.67	.67	.70	33.07	7.46
Logical Relationships	50	.89	.79	1.00	.72	.69	.69	37.41	7.95
Vocabulary	30	.82	.67	.72	1.00	.60	.56	20.00	5.27
Usage	40	.85	.67	.69	.60	1.00	.73	28.42	6.60
Sentence Structure	35	.84	.70	.69	.56	.73	1.00	23.87	6.03

value in the formula would imply a true correlation between the test and an essay score greater than one, an impossible condition. This is probably an extreme lower limit as there is evidence from other research studies that the true correlation between scores on essays and scores on objective tests is less than 1.0.

The obtained range of reliability estimates for the total essay scores were as follows:

	Lower limit	*Upper limit*
Essay A (pretest)—total analytic score	.47	.71
Essay B (pretest)—total holistic score	.51	.81
Essay C (positest)—total holistic score	.35	.77

A more direct estimate of total essay score reliability is available for essays A and B, which were administered concurrently. The correlation of these two total scores for 224 students completing both sets of exercises was found to be .73. This estimate is probably conservative because of the different formats of each essay and the different procedures used to score each. It is evident that the essay scores are reasonably stable and adequately reliable for use as criteria in assessing the validity of the tests.

CONCURRENT RELATIONSHIPS WITH ESSAY SCORES

The degree to which the DTLS measure important writing skills is the focus of this section. The specific question is how well indirect measures of writing ability using multiple choice questions (DTLS) correlate with direct measures of writing ability. The data discussed in the following paragraphs come from a sample of 224 students who took all five of the DTLS and the two essay pretest exercises (sets A and B).

Because we are interested in identifying students who would profit from remedial instruction in writing, we focus attention on specific tests. The Sentence Structure and Usage tests are probably most helpful in identifying students with writing deficiencies because they assess basic composition skills at the sentence level—skills important to success in most freshman composition courses. The Logical Relationships Test, which assesses skills in relating words and ideas and in recognizing principles of organization, may also be useful for placement in composition courses.

The remaining tests, Reading Comprehension and Vocabulary, should be most useful in identifying students who need special assistance in aspects of reading and vocabulary development. These tests may also reveal deficiencies that contribute to students' problems in written expression, but would not normally be used to place students in remedial writing courses.

Table 5 presents the correlations between the analytically and holistically scored essay pretests and the five DTLS. The correlations are substantial in all cases, although they are slightly higher for the holistically scored essay. The expected pattern of correlations is found in these data. Correlations between the essay and the Sentence Structure, Usage, and Logical Relationships tests are higher than those for either the Reading Comprehension or Vocabulary tests. The magnitude of these correlations is similar to correlations between objective tests and essays found in previous research studies. In a study of the relationship between the Test of Standard Written English (TSWE) and an essay test given at the beginning of the term, Breland (1977) found the correlation to be $r = .63$. Further, in a study of the New Jersey College Basic Skills Placement Test, Hecht (1980) found that the DTLS Sentence Structure and Logical Relationships tests both correlated $r = .62$ with essay tests. Thus the present findings are in line with previous research. It should be noted that criterion unreliability can artificially reduce the correlation between the predictors and the criterion. This is especially a problem when an essay score is used as a criterion. Therefore, the correlations involving essays cited here should be viewed as conservative estimates of their validity.

Table 5. Correlations of DTLS Scores with Total Scores on Essay Pretests (Sets A and B)
(N = 224)

	Total Analytic Score (Set A)	*Total Holistic Score (Set B)*
Reading Comprehension	.56	.58
Logical Relationships	.62	.66
Vocabulary	.53	.56
Usage	.63	.65
Sentence Structure	.62	.65

Tables 6 and 7 provide information on correlations for several subgroups of students taking the tests and the essays. Differences in correlations among the subgroups are not very large; however, a number of features of the data should be pointed out. First, correlations for females tend to be higher than those for males. Second, the correlations between DTLS scores and essay scores are predominantly, but not uniformly, lower for black than for white students. In particular, scores on the vocabulary test have little relationship to essay scores for this group of black students.

Table 6. Correlations of DTLS Scores with Total Analytic Scores on Essay Pretests (Set A) for Subgroups

	Males (N = 122)	*Females (N = 100)*	*Blacks (N = 38)*	*Whites (N = 144)*	*Total (N = 224)*
Reading Comprehension	.53	.59	.33	.46	.56
Logical Relationships	.58	.67	.23	.55	.62
Vocabulary	.50	.56	.18	.35	.53
Usage	.61	.66	.51	.55	.63
Sentence Structure	.59	.65	.43	.56	.62

Table 7. Correlations of DTLS Scores with Total Holistic Scores on Essay Pretests (Set B) for Subgroups

	Males (N = 122)	*Females (N = 100)*	*Blacks (N = 38)*	*Whites (N = 144)*	*Total (N = 224)*
Reading Comprehension	.61	.59	.36	.45	.58
Logical Relationships	.65	.69	.43	.54	.66
Vocabulary	.61	.54	.17	.39	.56
Usage	.63	.68	.59	.55	.65
Sentence Structure	.62	.69	.58	.57	.65

Table 8 presents correlations among DTLS scores for tests of sentence structure, usage, and logical relationships and the corresponding analytic subscores for essay Set A in the form of a *multitrait-multimethod matrix* (Campbell and Fiske 1970). The underlined values in the table represent convergent validity coefficients, that is, correlations of the same traits assessed by different methods. To provide evidence of convergent validity these correlations should be substantial positive values. Thus, the values in the table suggest reasonable convergent validity.

Evidence for discriminant validity requires that the values in the convergent validity diagonal be higher than values lying in their respective columns and rows in the shaded triangles, labeled *hetero method*. A convergent validity value should be higher than the correlations between that variable and any other variable having neither trait nor method in common. In the present study, this condition is not consistently met.

A second criterion for evidence of discriminant validity is that a variable correlates higher with an independent

Table 8. Multitrait-Multimethod Matrix: DTLS Scores and Essay Pretest Analytic Subscores (Set A)

		DTLS Scores			*Essay Subscores*		
		Sentence Structure	*Usage*	*Logical Relationships*	*Sentence Structure*	*Usage*	*Logical Relationships*
DTLS Scores	Sentence Structure	1					
	Usage	.76	1				
	Logical Relationships	.71	.68	1			
		mono method					
Essay Subscores	Sentence Structure	.56	.55	.57	1		
	Usage	.53	.55	.53	.76	1	
	Logical Relationships	.59	.59	.60	.59	.58	1
		hetero method			mono method		

measure of the same trait than with measures designed to examine different traits using the same method. This involves comparing the convergent validity values with the corresponding values in the unshaded triangles, labeled *mono method*. This condition is not met in the present study. That two different traits measured by the same method tend to correlate higher than a single trait measured by two independent methods is evidence of a substantial degree of method variance.

The data in the present study provide evidence for convergent validity but do not support discriminant validity. Several possible explanations may be offered for this. First, it is clear that the traits being assessed are closely related and are difficult to distinguish both logically and empirically. Second, the essay subscores used as a criteria are essentially experimental measures because the type of analytic scores performed for this study have not been extensively validated in the past. Finally, the interpretation of the multitrait-multimethod matrix is complicated by use of only a single essay to assess sentence structure, usage, and logical relationships skills. The lack of evidence for discriminant validity may be attributable to problems in the essay criteria as much as to failure of the tests to measure discriminable traits.

Although the multitrait-multimethod matrix analysis does not provide evidence of discriminant validity, a review of the intercorrelations among the DTLS (Table 4) does suggest discriminant validity. When the correlations between the tests are corrected for attenuation, they are not elevated to near 1.0.

Usage vs. Sentence Structure:

$$r_{xx}\,(\text{true}) = \frac{.73}{\sqrt{.85}\ \sqrt{.84}} = .86$$

Usage vs. Logical Relationships:

$$r_{xx}\,(\text{true}) = \frac{.69}{\sqrt{.85}\ \sqrt{.89}} = .79$$

Sentence Structure vs. Logical Relationships:

$$r_{xx}\,(\text{true}) = \frac{.69}{\sqrt{.84}\ \sqrt{.89}} = .80$$

Although the differences among these estimated true score correlations are small, they seem to suggest greater discriminant validity for the Logical Relationships Test than for the Usage and Sentence Structure tests.

PREDICTION OF END-OF-COURSE GRADES

Correlations of DTLS scores with grades in a number of regular and remedial writing courses are reported in Table 9. Only correlations based on 20 or more cases are included.

Grades in individual courses cannot normally be predicted very accurately. Several factors can account for this. Like test scores or any other measure of ability or achievement, grades are not perfectly reliable. Two instructors grading the performance of a single group of students would be unlikely to assign identical grades. In addition, grades reflect a number of factors, such as hard work on the part of students and the differential effectiveness of instruction in improving students' skills—factors that may reduce the extent to which measures of skills at the beginning of a course relate to outcomes. Indeed, it could be discouraging to find that end-of-course grades were almost perfectly predicted solely by measures of student skills prior to the course, for one would normally want other kinds of individual differences to be reflected in the grades.

Despite these reservations, DTLS scores should bear a relationship to grades in relevant courses if they are to be useful in placement. This is particularly true for grades in regular (as opposed to remedial) courses. In using test scores for placement, it is assumed that students with low scores will have difficulty in succeeding in the regular course. Thus, a useful placement test should predict grades in the regular course, and thereby aid in identifying students who may need special help before entering that course. Because remedial instruction is specifically designed to remedy the deficiencies disclosed by a test, a low level of relationship between test scores and ultimate course grades in remedial courses is not necessarily undesirable.

Examination of the correlations in Table 9 discloses that, with few exceptions, scores on the Reading Comprehension, Logical Relationships, Usage, and Sentence Structure tests are moderately related to grades in writing courses—median correlations of .35 to .39. For purposes of comparison, the median correlation of SAT-verbal or SAT-mathematical scores with first-year grade point average for colleges participating in the College Board Validity Study Service during the past five years, based on hundreds of studies, is about .36 for each test (College Entrance Examination Board, 1982). A study of the College Board's Test of Standard Written English found correlations of TSWE scores and fall-term English grades ranging from .32 to .35 in four colleges (Breland 1977). The results of this study of the DTLS are comparable to these.

The Reading Comprehension Test generally predicts grades in writing courses as well as or better than do scores on the Usage and Sentence Structure tests. Because the test content is not matched to course content, it would not normally be advisable to use Reading Comprehension scores to place students in remedial *writing* classes. However, the importance of reading ability to success in writing courses (as in courses of many kinds) is suggested by these findings. Vocabulary test scores also have some relationship to grades in a number of the courses in which studies were done, but in five out of twelve courses, there was essentiallly no relationship between vocabulary test scores and writing grades.

Table 9. Correlations of DTLS Tests and Self-Reported High School English Grades with Course Grades in College Composition Courses

School and Course Type	Reading Comprehension		Logical Relationships		Vocabulary		Usage		Sentence Structure		HS English GPA	
	r	(*n*)	*r*	(*n*)	*r*	(*n*)	*r*	(*n*)	*r*	(*n*)	*r*	(*n*)
College A												
Regular	—	(2)	—	(5)	—	(1)	.25	(50)	.30	(37)	.15	(38)
Remedial	.18	(27)	—	(17)	−.05	(28)	.44	(37)	.26	(40)	.01	(68)
College B												
Regular	.38	(131)	.46	(132)	.48	(132)	.28	(99)	.41	(121)	.47	(126)
Remedial	.55	(81)	.50	(79)	.44	(80)	.37	(79)	.54	(79)	.42	(77)
College C												
Regular	.57	(76)	.53	(76)	.38	(75)	.67	(75)	.65	(75)	.66	(71)
Regular	.45	(32)	.36	(31)	.03	(32)	.55	(32)	.45	(32)	.51	(31)
College D												
Regular	—	(19)	.22	(52)	.34	(72)	.38	(36)	.17	(58)	.21	(86)
Remedial	—	(0)	.20	(46)	—	(10)	.30	(29)	.28	(48)	−.09	(47)
College E												
Regular	.39	(71)	.34	(65)	−.02	(39)	.31	(56)	.42	(92)	.30	(147)
Remedial	.49	(20)	.09	(27)	.03	(48)	.52	(34)	—	(11)	.35	(90)
College F												
Regular	.41	(52)	.34	(55)	—	(0)	—	(0)	—	(0)	.51	(58)
College G												
Regular	.35	(74)	.37	(81)	.31	(59)	.30	(57)	.04	(56)	.25	(293)
Remedial	.39	(29)	.47	(21)	−.05	(33)	.46	(33)	.71	(39)	.13	(142)
College H												
Regular	.36	(127)	.47	(139)	.25	(141)	.47	(151)	.45	(151)	.33	(152)
Remedial	.24	(33)	.46	(32)	.41	(33)	.05	(33)	.29	(34)	−.02	(30)
College I												
Regular	.02	(20)	—	(0)	—	(0)	—	(0)	.26	(24)	—	(19)
Regular	.48	(41)	—	(0)	—	(0)	—	(0)	.32	(41)	.34	(36)
Regular	.47	(32)	—	(0)	—	(0)	—	(0)	.38	(33)	.32	(30)
Low	.02		.09		−.05		.05		.04		−.09	
High	.57		.53		.48		.67		.71		.66	
Median	.39		.37		.28		.375		.35		.32	

While the correlations of test scores with grades in remedial courses are on the whole lower than those with grades in regular courses, it is apparent that in a number of remedial courses, students' initial standings in these skill areas were related to their end-of-course grades. These remedial courses did not appear to have a substantially greater effect on the skills of the lowest-scoring students than on those for higher-scoring students.

Table 9 also shows correlations between self-reported high school English grades and end-of-course grades. With few exceptions a single DTLS predicts end-of-course grades better than self-reported high school English grades. A sense of comparison can be obtained from the Breland (1977) study. He found the correlation between self-reported high school English grades and end-of-course grades was $r = .17$ when pooled among institutions. The median correlation from the present study is $r = .31$.

PREDICTION OF ESSAY POSTTEST SCORES

Table 10 presents the correlations between the DTLS and the essay posttest. The correlations for all five tests for the total group are substantial (.44–.54) with the Sentence Structure Test showing the strongest relationship to the essay.

Table 10. Correlations of DTLS Scores with the Essay Posttest Scores (Set C)

	Total Group (123)
Reading Comprehension	.49
Logical Relationships	.44
Vocabulary	.44
Usage	.47
Sentence Structure	.54

A separate analysis of the students having total scores on Set C as well as scores on the pretest essays (sets A and B) and data on self-reported high school grades showed the following correlations with Set C scores.

Essay Pretest A	.54
Essay Pretest B	.49
Self-Reported High School English Grades	.37

$N = 49$

These findings are consistent with those of previous research studies. Breland in his 1977 study found that the TSWE was the best predictor of essay posttest performance ($r = .58$). In addition, he found that an essay pretest showed a strong relationship to the essay posttest ($r = .52$) and that high school English grades were not as good a predictor ($r = .34$) as either the TSWE or the essay pretest.

CONCLUSION

The results of the analyses reported have consistently shown that DTLS scores have a substantial concurrent relationship to carefully scored essays and that they predict writing course outcomes whether measured by end-of-course grades or a scored essay. In fact, each of the DTLS scores was found to predict posttest essay scores about as well as pretest essay scores did and somewhat better than self-reported high school English grades did. Thus, these results lend support to the use of the DTLS as an aid in making decisions about the placement of students in introductory level college composition courses.

The multitrait-multimethod matrix analysis did not provide evidence for the discriminant validity of the three DTLS that assess writing skills—Sentence Structure, Usage, and Logical Relationships. However, whether this was due to a failure of the tests to measure relatively independent traits or to problems with the criteria used for this phase of the analysis is an open question.

REFERENCES

Breland, Hunter M. 1977. *A Study of College English Placement and the Test of Standard Written English*. College Entrance Examination Board Research and Development Report, RDR 76–77, No. 4. Princeton, N.J.: Educational Testing Service.

Campbell, Donald T. and Donald W. Fiske. 1959. Convergent and discriminant validation by the multitrait-multimethod matrix. *Psychological Bulletin* 56: 81–105.

College Entrance Examination Board. 1978. *Guide to the Use of the Descriptive Tests of Language Skills*. New York: College Entrance Examination Board.

College Entrance Examination Board. 1982. *Guide to the College Board Validity Study Service*. New York: College Entrance Examination Board.

Hecht, Lawrence W. 1980. Validation of the New Jersey College Basic Skills Placement Test. Unpublished Report. Princeton, N.J.: Educational Testing Service.

Appendix A. Background Questions from the DTLS Answer Sheet

Please answer these questions by blackening the appropriate ovals on the first page of your answer sheet.

Ethnic Group
How do you describe yourself?

① American Indian, Eskimo, or Aleut
② Black, Afro-American, or Negro
③ Mexican American or Chicano
④ Oriental or Asian-American
⑤ Puerto Rican-American
⑥ Other Hispanic or Latin American
⑦ White or Caucasian
⑧ Other

Present Level
What is your current level?

① First semester freshman
② Second semester freshman
③ First semester sophomore
④ Second semester sophomore
⑤ Junior
⑥ Senior

English Background
a. How many years did you study English in high school?

① One year or the equivalent
② Two years or the equivalent
③ Three years or the equivalent
④ Four years or the equivalent
⑤ More than four years or the equivalent

b. In high school, what was your overall grade average in English?

① Mostly A's, usually 90-100, or excellent
② Mostly B's, usually 80-89, or good
③ Mostly C's, usually 70-79, or fair
④ Mostly D's, usualiy 60-69, or passing
⑤ Mostly D or below (Mostly 59 or lower, failing)

c. Do you plan to apply, or have you applied, for advanced placement, credit by examination, or exemption from English courses?

Ⓨ Yes
Ⓝ No

d. During your high school years, did you receive honors or awards in English?

Ⓨ Yes
Ⓝ No

e. Is English your best language?

Ⓨ Yes
Ⓝ No

Appendix B. Instructions for Administering DTLS Exercises, the DTLS Exercises, and the DTLS Scoring Criteria

Instructions for Administering DTLS Writing Exercises

There are two sets of exercises (A and B). Each may be given either as an in-class activity or as a homework assignment. Suggested time for each set is 40 minutes.

These essays should be written as near to the time that the DTLS tests are taken as possible—certainly within two weeks. All students completing one set should also complete the other set.

The exercises are generally self-explanatory. Students are expected to write brief essays that will fit the alloted space.

If the exercises are given during a class period or some other limited time period, the following pacing instructions should be given to help students complete each set.

For Set A:

After eight minutes from the beginning of the period, say: "You should now have begun exercise two."

After twenty minutes from the beginning of the period, say: "You should now have begun exercise three."

After twenty-eight minutes from the beginning of the period, say: "You should now have begun exercise four."

For Set B:

After twenty minutes from the beginning of the period, say: "You should now have begun the second essay."

Return all completed exercises to the person coordinating this project at your college.

Direct any questions to your coordinator or to Rex Jackson, Educational Testing Service, 609-921-9000 extension 3450 (call collect).

Thank you very much.

DTLS Writing Exercises—Set A
Suggested time—40 minutes

Name _____
(Please print) Last First Middle Initial

Instructor _____

These exercises were completed: ☐ in class ☐ at home

1. Briefly describe the room in which you are writing this.

2. Think about a person you are familiar with. Briefly tell what you like about that person and what you don't like. Give reasons for your opinion.

3. In a few sentences, compare two things (for example, a cup and a glass, an apple and an orange, a desk and a chair, two pairs of shoes, two hats, two birthday cards).

4. Think about a time when you did something you were proud of (for example, when you finally passed a certain course, when you helped a friend, when you did something you had always been afraid to do, when you stood up for yourself). Briefly tell what happened.

DTLS Writing Exercises—Set B
Suggested time—40 minutes

Name_____
(Please print) Last First Middle Initial

Instructor_____

These exercises were completd: ☐ in class ☐ at home

You are to write short essays on the two topics given below. Express your thoughts as carefully, naturally, and effectively as you can. How well you write is much more important than how much you write. *Be sure to write on the topic given.*

1. (20 minutes) "Opposition is indispensable. We always learn more from the people who disagree with us than from those who share our views."

   Do you agree with this observation? Have you profited more from experiences with people whose views were similar to yours or from experiences with people whose views opposed your own? Discuss, using one or two specific examples to support your position.

2. (20 minutes) "Each of us is fascinated by stories of crime and violence. Perhaps we are curious about the varieties of human experience. Or perhaps we are cleansing ourselves of the violence of our own emotions."

   To what extent are these valid explanations, or are there other reasons? Discuss. Support your arguments with specific illustrations from your reading, study, or observation.

DTLS Writing Exercises—Set C
Time—20 minutes

Name_____
(Please print) Last First Middle Initial

Instructor_____

You are to write a short essay on the topic given below. Express your thoughts as carefully, naturally, and effectively as you can. How well you write is much more important than how much you write. *Be sure to write on the topic given.*

We constantly hear that television is a bad influence on our lives. We hear that it teaches people to be violent and to commit crimes. We hear that it tempts people to stay "glued to the boob tube" instead of talking to each other or reading. In short, in one way or another, television seems to be blamed for all that is bad in our lives. Yet, most of us watch television and undoubtedly see some good in it.

What good do you see in television? Choose one or two ways in which you think that television is of benefit to individuals, to families, or even to all of society. Tell exactly what you consider the benefits of television to be and tell how television works to improve or to help people. Use specific examples to support your ideas.

DTLS Scoring Criteria

Student Number _____ School _____

Name _____

	No Flaws	One or Two Flaws—probably from haste	Several Flaws	Completely Flawed
1. Uses complete sentences	_____	_____	_____	_____
2. Uses coordination and subordination appropriately	_____	_____	_____	_____
3. Places modifiers appropriately	_____	_____	_____	_____
4. Uses modifier forms correctly	_____	_____	_____	_____
5. Follows pronoun-antecedent agreement	_____	_____	_____	_____
6. Gives each pronoun an antecedent	_____	_____	_____	_____
7. Uses pronoun case correctly	_____	_____	_____	_____
8. Uses appropriate diction	_____	_____	_____	_____
9. Uses appropriate idioms	_____	_____	_____	_____
10. Uses subject-verb agreement	_____	_____	_____	_____
11. Uses tenses correctly	_____	_____	_____	_____
12. Uses verb forms correctly	_____	_____	_____	_____
13. Uses connecting words appropriately	_____	_____	_____	_____
14. Uses specific examples	_____	_____	_____	_____
15. Has beginning, middle, end	_____	_____	_____	_____
16. Organizes essay satisfactorily	_____	_____	_____	_____

Reader Number _____